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(54) **CARRIER SHAFT SET**

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(52) **U.S. Cl.**
CPC ***F16H 57/082*** (2013.01); ***H02K 7/003*** (2013.01); *Y10T 29/49465* (2015.01)

(58) **Field of Classification Search**
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See application file for complete search history.

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(57) **ABSTRACT**

A carrier shaft set includes an input carrier shaft portion and a carrier shaft portion. The input carrier shaft portion has an input carrier shaft portion axis defined between a planetary gear set end and an input shaft end having an outer surface. The input carrier shaft portion includes a wedge-shaped member having an outer edge. A ratio of a length defined between the input carrier shaft portion axis and the outer edge to the outer surface is between 1.23 and 1.30. The carrier shaft portion has a carrier shaft portion axis defined between a planetary gear set end and a shaft end. The carrier shaft portion includes a shaft portion having an outer surface and a wedge-shaped member having an outer edge. A ratio of a length defined between the carrier shaft portion axis and the outer edge to the shaft portion outer surface is between 1.23 and 1.30.

15 Claims, 7 Drawing Sheets